

We claim:

1. A configuration export apparatus for enabling a system administrator having a data password to export configuration data to a persistent configuration text file, the configuration export apparatus comprising:

a encryption/decryption apparatus, having an encryption/decryption key derived from the data password,

an import/export selector apparatus to select an export operation,

a memory configuration table having at least one configuration variable set, each configuration variable set having at least configuration variable, each configuration variable having:

a memory name,

a memory value,

a textual name,

and a textual value,

each configuration variable is denoted as either a private variable or a public variable,

if export is selected:

for each public variable, the textual value is derived from the clear-text memory value of the public variable,

for each private variable, the encryption/decryption apparatus derives the textual value of the private variable by encrypting the memory value of the private variable,

a device management program, the device management program further comprising:

a device import/export configuration apparatus further comprising a hashing apparatus,

the device import/export configuration apparatus upon receiving an export selection from the import/export selector apparatus:

receives the data password and a file name of the persistent configuration text file,

hashes the data password and produces a textual hashed digest from the data password,

writes the textual hashed digest to the persistent configuration text file,

for each variable in configuration variable table,

receives the textual identifier and the textual value from the configuration variable table,

and writes the textual identifier and the textual value to the persistent configuration text file, textually associating the memory identifier and textual value in the persistent configuration text file.

2. A configuration import apparatus for enabling a system administrator having a data password to import configuration data to from a persistent configuration text file having a first textual hashed digest and at least one textual configuration variable, each textual configuration variable further comprising a textual identifier and a textual value, the configuration import apparatus comprising:

a encryption/decryption apparatus having an encryption/decryption key derived from the data password,

an import/export selector apparatus to select an import operation,

a memory configuration table having at least one configuration variable set, each configuration variable set having at least configuration variable, each configuration variable having:

a memory name,

a memory value,

a textual name,

and a textual value,

each configuration variable is denoted as either a private variable or a public variable,

if import is selected:

for each public variable, the memory value is derived from the clear-text textual value of the public variable,

for each private variable, the encryption/decryption apparatus derives the memory value of the private variable by decrypting the textual value of the private variable,

the device import/export configuration apparatus upon receiving an import selection from the import/export selector apparatus:

reads a second textual hashed digest from the persistent configuration text file,

for each textual configuration variable in persistent configuration text file:

reads the textual identifier and textual value,

uses the textual value to identify the configuration variable set and configuration variable associated with the textual value,

if said configuration variable set contains only public variables  
then

the identified configuration variable of the configuration variable table is set to the textual value of the configuration variable table, and a new memory value is derived,

else

if said configuration variable set contains at least one private variable and the first textual hashed digest matches the second textual hashed digest  
then

the identified configuration variable of the configuration variable table is set to the textual value of the configuration variable table, and a new memory value is derived,

otherwise, the configuration variable is discarded.

3. A configuration import/export apparatus for enabling a system administrator having a data password to import and export configuration data to and from a persistent configuration text file having a first textual hashed digest and at least one textual configuration variable, each textual configuration variable further comprising a textual identifier and a textual value, the configuration import/export apparatus comprising:

a encryption/decryption apparatus having an encryption/decryption key derived from the data password,

an import/export selector apparatus to select either an import or an export operation,

a memory configuration table having at least one configuration variable set, each configuration variable set having at least configuration variable, each configuration variable having:

a memory name,

a memory value,

a textual name,

and a textual value,

each configuration variable is denoted as either a private variable or a public variable,

if export is selected:

for each public variable, the textual value is derived from the clear-text memory value of the public variable,

for each private variable, the encryption/decryption apparatus derives the textual value of the private variable by encrypting the memory value of the private variable,

if import is selected:

for each public variable, the memory value is derived from the clear-text textual value of the public variable,

for each private variable, the encryption/decryption apparatus derives the memory value of the private variable by decrypting the textual value of the private variable,

a device management program, the device management program further comprising:

a device import/export configuration apparatus further comprising a hashing apparatus,

the device import/export configuration apparatus upon receiving an export selection from the import/export selector apparatus:

receives the data password and a file name of the persistent configuration text file,

hashes the data password and produces a textual hashed digest from the data password,

writes the textual hashed digest to the persistent configuration text file,

for each variable in configuration variable table,

receives the textual identifier and the textual value from the configuration variable table,

and writes the textual identifier and the textual value to the persistent configuration text file, textually associating the memory identifier and textual value in the persistent configuration text file,

the device import/export configuration apparatus upon receiving an import selection from the import/export selector apparatus:

reads a second textual hashed digest from the persistent configuration text file,

for each textual configuration variable in persistent configuration text file:

reads the textual identifier and textual value,

uses the textual value to identify the configuration variable set and configuration variable associated with the textual value,

if said configuration variable set contains only public variables then

the identified configuration variable of the configuration variable table is set to the textual value of the configuration variable table, and a new memory value is derived,

else

if said configuration variable set contains at least one private variable and the first textual hashed digest matches the second textual hashed digest

then

the identified configuration variable of the configuration variable table is set to the textual value of the configuration variable table, and a new memory value is derived,

otherwise, the configuration variable is discarded.

5 4. The configuration import/export apparatus of claim 3 further comprising:

a server,

said device import/export configuration apparatus further comprising:

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a client configuration import/export apparatus,

a server configuration import/export apparatus,

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said server including said server configuration import/export apparatus.

5. The configuration import/export apparatus of claim 4, said server further includes said encryption/decryption apparatus.

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6. The configuration import/export apparatus of claim 4 wherein said server is a virtual private network server.

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7. The configuration import/export apparatus of claim 6 wherein said encryption/decryption apparatus is DES, said device management program is a Microsoft Windows GUI computer program, said import/export selector apparatus is a Microsoft Windows menu.

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